TABLE 2 - 01/05/12
SAMPLE ANALYTICAL REQUIREMENTS SUMMARY
DIMOCK RESIDENTIAL GROUNDWATER SITE
DIMOCK, SUSQUEHANNA COUNTY, PENNSYLVANIA

Analytical parameter and Method	Matrix	Sample Preservation	Holding Time	Sample Container(s)	Total QC Volume (Includes Field Sample Volume)
Ft. Meade					
Alcohols: Ethanol, methanol, 1-propanol, 1-butanol, 2-butanol (8015D)	drinking water	Ice, 6°C	7 days	Two 40-ml glass vials (Fill to capacity with no head space)	Five 40-ml glass vials
Anions: Chloride, Bromide, Fluoride, Nitrate/Nitrite as N, Orthophosphorus as P, Sulfate as SO4 (300.0)	drinking water	Ice, 6°C	28 days	One 500-ml HDPE	Two 500-ml HDPE
Glycols incl. 2-Butoxyethanol (8316)	drinking water	Ice, 6°C	7 days	One 40-ml glass vial (Fill to capacity with no head space)	Three 40-ml glass vials
Metals: Al, B, Ca, Cr, Cu, Fe, Mg, Mn, Ni, Na, As, Se, Zn, Ti, Sr, Ba, Sn, Sb, Be, Cd, Co, Tl, U, V, K, Hg (200.7/200.8/245.1)	drinking water	pH<2 with HNO3 and cool with ice, 4°C	6 months	One 500-ml HDPE	Three 500-ml HDPE
Metals, Dissolved: Al, B, Ca, Cr, Cu, Fe, Mg, Mn, Ni, Na, As, Se, Zn, Ti, Sr, Ba, Sn, Sb, Be, Cd, Co, Tl, U, V, K, Hg (200.7/200.8/245.1)	(filtered) drinking water	pH<2 with HNO3 and cool with ice, 4°C	6 months	One 500-ml HDPE	Three 500-ml HDPE
Wet Chemistry: - Phosphorus, Total (365.1); - Nitrate/Nitrite (353.2); - Nitrogen; Total (353.2)	drinking water	pH<2, H2SO4, and cool with ice, 4°C	28 days	One 500-ml HDPE	Three 500-ml HDPE
Semi-Volatiles (TCL plus TICs) (OLC03.2)	drinking water	Ice, 6°C	7 days	Two 1-Liter amber glass jars with teflon-lined lids	Five 1-Liter amber glass bottles
Solids, Total Dissolved (TDS) (SM 2540C)	drinking water	Ice, 6°C	7 days	One 500-ml HDPE	Two 500-ml HDPE
Solids, Total Suspended (TSS) (SM 2540D)	drinking water	Ice, 6°C	7 days	One 500-ml HDPE	Two 500-ml HDPE
Volatiles + Acrylonitrile (TCL + TICs, CLP Trace - 0.5 ug/L QL) (OLC03.2)	drinking water	2 drops of 1:1 HCl, pH<2, Ice, 6°C	14 days	Four 40-ml glass vials w/Teflon lined cap (no head space)	Twelve 40-ml glass vials
Tier IV					
Isotech - d13C and d2H of methane; - Complete compositional analysis of headspace gas; - Stable isotopes of water (O,H)	drinking water	Ice, 4°C, biocide pill in sample container	6 months	One 1-Liter HDPE	No MS/MSD Req'd
Tier IV					
Bacteria (fecal & total coliform, HPC) (SM 9222B; SM 9215B w/R2A medium)	drinking water	Ice, 4°C (.008% Na2S2O3 if residual Cl- present)	6 hours	One 125 ml Pre-sterilized polyproylene	No MS/MSD Req'd
NAREL					
Alpha Spec (Th-232, Th-228, Th-230) (DOE HASL 300)	drinking water	pH<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE	No MS/MSD Req'd
Alpha Spec (U-234, U-235, U-236, U-238) (DOE HASL 300)	drinking water	pH<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE	No MS/MSD Req'd
Gamma Spec Bi-212, Bi-214, K-40, Ra-226, Ra-228, Th-232, Th-234, U-234, U-235, U-238 (901.1)	drinking water	pH<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE	No MS/MSD Req'd
Gross Alpha/Beta (900.0)	drinking water	pH<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE	No MS/MSD Req'd
Ra-226 (903.1)	drinking water	pH<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE	No MS/MSD Req'd
Ra-228 (904.0)	drinking water	pH<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE	No MS/MSD Req'd
Rn-222 (SM 7500-Rn)	drinking water	Ice, 4°C	72 hours	Three 40-ml glass vial	No MS/MSD Req'd
Tier IV					
1-methylnapthalene (8270 or equivalent)	drinking water	Ice, 6°C	7 days	Two 1-Liter amber glass jars with teflon-lined lids	Six 1-Liter Amber
2-Methoxyethanol (8015B)	drinking water	Ice, 6°C	7 days	Two 1-Liter amber glass jars with teflon-lined lids	Six 1-Liter Amber
Dissolved Gases, Methane, Ethane, Ethene, Propane, Butane (RSK-175)	drinking water	pH<2 with HCl and cool with ice, 4°C	7 days	Two 40-ml glass vial	Six 40-ml glass vial
DRO (8015M)	drinking water	Ice, 4°C	7 days extract	Two 1-Liter amber glass jars with teflon-lined lids	Six 1-Liter Amber
Ethylene Glycol (8015M)	drinking water	Ice, 4°C	7 days	Two 40-ml glass vials (Fill to capacity with no head space)	Six 40-ml Glass vials
GRO (8015M)	drinking water	pH<2 with HCl and cool with ice, 4°C	14 days	Two 40-ml glass vials (Fill to capacity with no head space)	Six 40-ml Glass vials
Methylene Blue Active Substances (MBAS) (SM 5540C)	drinking water	Ice, 4°C	48 hours	One 500-ml HDPE	No MS/MSD Req'd
Oil & Grease (HEM) (1664A)	drinking water	pH<2, H2SO4, and cool with ice, 4°C	28 days	One 1-Liter amber glass jars with teflon-lined lids	No MS/MSD Req'd

KEY:

°C = degrees Celsius
C14 = Carbon 14 isotope
CLP = Contract Lab Program
D13C = delta of carbon-13
D2H = delta of deuterium
H2SO4 = Sulfuric Acid
HDPE = High density polyethylene
HNO3 = Nitric Acid
HPC = Heterotrophic Plate Count
ml = milliliter
Na2S2O3 = Sodium Thiosulfate
pH = potential Hydrogen
QL = Quantitation Limit
Sr = Strontium
TCL = Target Compound List
TICs = Tentatively Identified Compounds
ug/L = micrograms per liter